## Sensitive Areas and Practices Workgroup

DRAFT Direct Conduits to Groundwater Recommendations - 03-23-2016

"Direct Conduit to Groundwater" means wells, sinkholes, swallets, fractured bedrock at the surface, mine shafts, non-metallic mines, tile inlets discharging to groundwater, quarries, or depressional groundwater recharge areas over shallow fractured bedrock. - Chapters NR 151.002 (11m) and NR 243.03 (20), Wis. Adm. Code

Sensitive Area	Practice
Direct Conduit to Groundwater	1. Inspect fields according to workgroup recommendation 1 (below).
	Permanently mark identified direct conduits to groundwater and drain tile inlets within field AND implement the following:
	<ul><li>a. Install a 5 foot vegetated buffer around all identified feature(s);</li><li>b. The feature(s) and 5 foot buffer should not be tilled, planted or receive nutrients</li></ul>
	3. No manure application within:
	<ul> <li>a. 1000 feet of public 'community" water supply wells</li> <li>b. 250 feet of private potable and public "non-community" water supply wells (e.g., bars and restaurants, churches and parks);</li> <li>c. 100 feet of all other "direct conduits to groundwater" and 300 feet when soil is frozen or snow covered;</li> <li>d. 100 feet of defined channels and concentrated flow path(s) that lead to 3a, 3b or 3c</li> </ul>
	4. For groundwater monitoring wells, consult with local county government or DNR to determine appropriate setback distance before applying manure
	5. Annually consult with local municipality for boundaries and requirements of local wellhead protection plans

Recommendation 1 - (source: SAP Workgroup Recommendations with Consensus - 01-19-2016)

Inspect fields according to a., b., and c. below for depth to bedrock, groundwater conduits, contributing channels or areas that drain to groundwater conduits, drain tiles that may drain/discharge to groundwater conduits and evidence of fracture traces; keep inspection logs and update NMP maps with identified features.

- a. Inspect annual cropped fields in spring before manure application, tillage, or planting or in late summer/fall after crop harvest and before manure application, tillage, or planting.
- b. Inspect alfalfa and perennial cropped fields in spring and summer before or 7-10 days after cutting look for uneven crop growth that follows distinct lines.
- c. Use direct measurements (backhoe, probe, test pits, electric resistivity, etc.) to verify depth to bedrock and groundwater.